

1     Claims

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3     1.    A variable vibrator mechanism comprising:

4           a first member and a second member arranged  
5     telescopically with one another,

6           wherein said first member has a first eccentric  
7     weight and said second member has a second eccentric  
8     weight,

9           wherein said first and second members are  
10    adapted to be engaged with one another, such that  
11    the rotational displacement between said first  
12    eccentric weight and said second eccentric weight  
13    may be varied by varying the longitudinal  
14    displacement between said first and second members.

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16    2.    A variable vibrator mechanism as claimed in  
17    claim 1, wherein one of said first and second  
18    members is adapted to receive the other of said  
19    first and second members.

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21    3.    A variable vibrator mechanism as claimed in any  
22    preceding claim, wherein said first and second  
23    members are threadably engaged with one another.

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25    4.    A variable vibrator mechanism as claimed in any  
26    preceding claim, wherein said first and second  
27    members are cylindrical.

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29    5.    A variable vibrator mechanism as claimed in any  
30    preceding claim, wherein the vibrator mechanism  
31    comprises two first members arranged telescopically  
32    with said second member,

1            wherein said two first members and said second  
2 member are adapted to be engaged with one another,  
3 such that the rotational displacement between said  
4 first eccentric weights and said second eccentric  
5 weight may be varied by varying the longitudinal  
6 displacement between said first members and said  
7 second member.

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9        6.    A variable vibrator mechanism as claimed in any  
10 preceding claim, wherein further comprising means  
11 for telescopically displacing said first and second  
12 members.

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14        7.    A variable vibrator mechanism as claimed in  
15 claim 6, wherein the means for telescopically  
16 displacing said first and second members is a  
17 hydraulic ram.

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19        8.    A variable vibrator mechanism as claimed in any  
20 preceding claim, wherein said vibrator mechanism  
21 comprises a plurality of pairs of first and second  
22 members, wherein each pair of first and second  
23 members are arranged telescopically with one  
24 another.

25  
26        9.    A vibrating screen machine including a variable  
27 vibrator mechanism according to any of claims 1 to  
28 8.

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30        10.   A vibrating feeder machine including a variable  
31 vibrator mechanism according to any of claims 1 to  
32 8.